

ABSTRACT

A computing environment is provided with the ability to contribute to  
5 generate a representation for a fillet weld bead to be used to fillet weld a  
number components of an article of manufacture together at one or more  
faces of the components in the manufacturing of the article outside the  
computing environment, including the ability to examine facial characteristics  
of the faces, select a generation technique based at least in part on the result  
10 of the examination, and apply the selected generation technique followed by  
end trimming to generate a data representation of the fillet weld bead.